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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/081,294	02/21/2002	Kimmo Alanen	460-010837-US(PAR)	9809
2512	7590	07/19/2006	EXAMINER	
PERMAN & GREEN 425 POST ROAD FAIRFIELD, CT 06824			ISSING, GREGORY C	
			ART UNIT	PAPER NUMBER
			3662	

DATE MAILED: 07/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/081,294	Applicant(s) ALANEN ET AL.	
	Examiner Gregory C. Issing	Art Unit 3662	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 June 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 3662

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-25 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, the limitations define the use of more than one reference points to calculate a default position which is contradictory to the limitations set forth in claim 4. This is also applicable to claims 11 and 14.

Claims 1, 11 and 21 are indefinite as failing to clearly and distinctly define the subject matter since there is no use of the determined default position. Rather, the claim recites using the positions of a plurality of reference points to estimate a pseudorange which does not particularly point out the claimed subject matter. An amendment substituting the language of the "default position" for the positions of the plurality of reference points in estimating a pseudorange would overcome this problem.

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 1- 25 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The specification does not adequately describe the use of a plurality of reference station positions to estimate a pseudorange. An amendment substituting the language of the "default position" for the positions of the plurality of reference points in estimating a pseudorange would overcome this problem.

5. Claims 1-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bloebaum et al (6,433,735) in view of Krasner (6,133,874) and any one of Freeny, Jr. (4,112,421), Freeny Jr. et al (4,209,787) or Konneker (4,864,313).

6. Bloebaum et al disclose a method and apparatus for positioning a wireless communication device (110/200) wherein a database (210/210a) correlates respective cell IDs of a plurality of base stations with

Art Unit: 3662

base station position information, e.g. Figs. 3/4; this corresponds to the claimed storing of position data of reference points. The communication device receives the cell ID from the base station in which it is associated and thus is in its vicinity; this corresponds to the claimed examining which reference point is located in the vicinity of the communication device. If the database is at a server, the server transmits the position data, aiding data, to the communication device; this corresponds to the claimed transmitting position data about the reference point. As exemplified in Figure 5, and described in the specification (5:66- 6: 18), the positioning processor utilizes the position entry corresponding to the matched cell-ID information to compute a current position estimate also using position information from a positioning satellite. The cell-indexed location database is capable of aiding in position computation (6:64-67). Thus, Bloebaum clearly specify the use of the position data of the reference station and satellite signal information to compute a position estimate. The receiver inherently receives the identifications of any base stations that are within range of the receiver

7. Although Bloebaum et al are considered to substantially disclose the claimed invention via the apparent inherency of using the cell-indexed location as a default location to be used in computing a position estimate wherein a position determination in GPS inherently determines a pseudorange, the following citation to Krasner provides evidence of the nature of such. Krasner discloses the following factual statements: (I) there are two principal functions of GPS receiving systems (1) computation of pseudoranges to the various satellites and (2) computation of the position of the receiving platform using these pseudoranges and satellite timing and ephemeris data (1:39-45); (II) an approximate location of the receiver is determined from a cell-based information source and an estimated pseudorange for a particular satellite is determined from time of day, the determined approximate location of the receiver, and satellite position information of the particular satellite (4:50-65); and (III) it is desirable to limit search range during initial signal acquisition to reduce the search time, and the method and apparatus substantially defined by (II) provides such (4:35-65).

8. Thus, should the teachings of Bloebaum et al not be considered as inherently teaching the use of the cell-based location entry as a default location in the estimation of the communication device position nor inherently teaching that a pseudorange is necessarily computed in the determination of position using

Art Unit: 3662

time-of-transit measurement and the cell-based location entry, it would have been obvious to one having ordinary skill in the art to perform such in view of the teachings of Krasner as set forth above.

9. The amended claims now recite the use of “more than one reference points” to determine a default position. As set forth above, the receiver of Bloebaum inherently receives the cell ID information from any and all within-range base stations. The plurality of base stations locations are each associated with a cell ID. However, Bloebaum et al do not specify the use of a plurality of base stations to determine a default location. Each of Freeny, Jr. (4,112,421), Freeny Jr. et al (4,209,787) or Konneker (4,864,313) teach old and well-known proximity type location methods wherein it is known to utilize proximity to one or more of a plurality of known locations to estimate a target receiver's location. Each reference teach that the location is estimated via the knowledge of proximity to a transmitter transmitting an encoded identification code associated with a location. For example, see Freeny, Jr ('421) 52:38-56, Freeny, Jr ('987) 1:33-37, and Konneker 2:5-25. Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Bloebaum et al by utilizing the cell ID information from any/all of the base stations within range of the user to more distinctly estimate a location in view of the teachings of any one of Freeny, Jr. (4,112,421), Freeny, Jr. et al (4,209,787) or Konneker (4,864,313).

10. Applicants argue that the prior art fails to teach the use of more than one reference station to estimate a location. This argument is not persuasive in view of the conventionality of proximity type positioning methods well-known to the skilled artisan in the field of positioning as shown by each of Freeny, Jr. (4,112,421), Freeny Jr. et al (4,209,787) or Konneker (4,864,313).

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of


Art Unit: 3662

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gregory C. Issing whose telephone number is (571)-272-6973. The examiner can normally be reached on Monday - Thursday 6:00 AM- 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Tarcza can be reached on (571)-272-6979. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Gregory C. Issing
Primary Examiner
Art Unit 3662

gci